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ABSTRACT

A case is presented for a major overhaul in the language arts curriculum, based on the idea that traditional teaching methods, especially in reading and writing, that do not take into account children's natural tendency to make sense of their world and to base new learning on what they already know, are ineffective or even inhibitive of literacy acquisition. It is argued that instruction by presentation of small, discrete bits of information in isolated lessons unrelated to the authentic functions of language should be replaced by a classroom situation conducive to exploration and discovery and activities in which children can use problem-solving abilities to discover reading and writing. Current practices in reading and writing instruction are described and their effectiveness for both the general student population and for students "at risk" is criticized. Research and theory on the development of literacy are reviewed, and some parallels between that process and the acquisition of oral language are drawn. Finally, a different orientation toward literacy in the primary classroom, based on the application of certain language acquisition principles, is proposed and examples of learning activities consistent with current language acquisition research conclusions are provided. (MSE)

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THE TEACHER'S ROLE IN NATURAL

LITERACY ACQUISITION

a paper by Jan K. Curtis

Ontario Institute for Studies in Education

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INTRODUCTION

In my first grade class a number of years ago there was a little girl named Miriam who was learning to read in Spanish. Miriam had learned the word 'la' embedded in the sentence, 'Vamos a jugar con la bola.' (We're going to play with the ball.) I noticed that every time she encountered the word 'la' in print, Miriam would shut her eyes and say to herself in a barely audible whisper, "Vamos a jugar con la..," "LA" (outloud) and then continue reading. Now Miriam was not a "good reader". In fact, she was in a "low" reading group. In addition to their work in the basal series, her group had received daily phonics lessons over a period of four or five months which focused on the five vowel sounds and their combination with the consonants M, S, and L to produce countless syllables and words, one of which was 'la'.

That Miriam was receiving reading instruction in Spanish was considered a victory. Years of struggle with legislators and local policy makers had finally been successful in providing for primary language instruction in the early grades. In retrospect, I wonder if our success wasn't actually rather limited. How much more sensible were the phonics lessons Miriam received in Spanish than phonics lessons in English would have been?

I now feel that the focus of the educational and political controversy in the States upon language of instruction as a choice between the child's first and second languages largely misses the point. The question of equal (if not greater) importance concerns not WHICH language is used in the classroom, but rather HOW language is used in the classroom.

So long as instruction chops language into teachable, testable bits, whether first language or second, oral language or written, the student who does manage to learn anything does so IN SPITE OF the school program and not because of it. Frank Smith (1983) expresses the point well:

> The programatic technology of contemporary instruction, straining to 'deliver' testable units of information or skill to children on schedule and in forms by which teachers can be held accountable for continuous acquisition, is inevitably antagonistic to the manner in which children necessarily strive to learn. (p. 137)

I contend that traditional teaching methods, especially those concerned with reading and writing, which fail to take into account children's natural tendency to make sense of their world and to base new learning on what they already know, are worse than ineffective. For many children, they may actually prevent

the acquisition of literacy.

In this paper, I will present a case for major curriculum overhaul in the area of Language Arts. I will first describe current practices in the teaching of reading and writing, and my reasons for judging them to be ineffective, both for the general student population and for students "at risk".

I will examine a relevant body of research and theory on the development of literacy, drawing some parallels between that process and the acquisition of oral language.

Finally, I will propose a different orientation towards literacy in the primary level classroom, one which is based on the application of certain principles of language acquisition, providing examples of learning activities which are consistent with current research conclusions about how language is learned.

The examples I will describe should not be thought of as "extras" to be added to the teacher's bag of tricks. It is not my point that these ideas be used in addition to the regular basal reader series and spelling program. What I am proposing is that students be invited to participate in meaningful learning activities in which the requirement for them to read and to write will be a natural part of the process. Experience with written language will in this way be woven into the learning situation, not set up as its product or goal.

CURRENT PRACTICES IN LITERACY INSTRUCTION

In a recent issue of Language Arts (Nov./Dec., 1982) Patrick Shannon reviews six decades of articles published in that journal and its predecessors, Elementary English and The Elementary English Review, on the topic of teachers' reliance on commercially published reading materials. Shannon demonstrated that three main themes have persisted for over sixty years in the literature: analysis of the content of materials, arguments regarding appropriate methodology, and descriptions of teachers' use of the materials.

Shannon provides a thorough documentation of the pendulum's swing on the debate over phonics instruction versus reading as a meaning-getting process since 1926 and points out the association between changing perspectives on methodology and commercial publication of new teaching materials.

Regardless of the approach in fashion at any one time, the vast majority of teachers continue to depend heavily upon basal readers, workbooks and reading kits. He concludes that the overriding implication from the literature is "that teachers use the materials because it is an easy way to conduct school." (p. 850)

Shannon charges that research has failed to examine teachers' motives in reliance upon such materials. I tend to agree that it would make sense to ask teachers directly. However, I seriously doubt whether very many would admit the extent to which ease of delivery influences their decision. Several other more respectable factors seem to be involved, most notably the teachers' obligation to "cover" the school's specified curriculum objectives and his or her accountability to parents and administrators for having done so.

I think, however, that the real issue goes deeper. The teacher's conception of the learning process itself, and of his or her role in it, is at the heart of the matter. Most administrators and teachers probably believe that such devices as "programmed instruction" and "controlled vocabulary" actually facilitate learning, that skills can and should be delivered according to a predetermined sequence, bit by bit, from what adults have decided are the easiest bits toward the most difficult.

Marie Clay (1983) describes this perspective on learning and the sort of teaching it brings about:

> The view leads to practices in which the introduction of new information is strictly controlled and the aim is to have the child practise each performance perfectly. The learner develops feedback systems which control this continuing perfection. Every item is introduced by the teacher in a controlled sequence designed to prevent the child from making mistakes; the teacher determines how often the child will practise each item and allows the child to discover only those features necessary for the programme. It is as if teachers considered children to be incompetent and themselves to be competent, with a sound knowledge of how to teach and what to teach. When a teacher instructs in a sequence detailed by a theory or a curriculum or a publisher's programme, it is assumed that the present curriculum steps with linear goals will be appropriate for individual children. (pp. 277-278)

Another consequence of this approach is the inevitable separation of reading from the other areas of language skill. Not only are reading lessons divided into exercises on "word attack" or "structural analysis" or "comprehension", but specific skills are taught separately in a single area, e.g., reading comprehension exercises on "Getting the Main Idea" are presented on one

occasion while other exercises on "Drawing Conclusions" would be part of a different lesson. Typically, days and weeks in school are divided into blocks, with reading group meetings at one time of day and spelling exercises, handwriting, listening, phonics, and grammar forming a patchwork of unrelated lessons. The relationship among these various skills is never made explicit. The assumption must be that the children will somehow piece together the patches and end up with an integrated proficiency with written language.

Curriculum guides, report cards, parent-conference checklists, and the student record cards that come with commercially published reading and language arts packages all reinforce this approach to teaching. There are little boxes to be filled when each child has mastered each little skill, for example, short vowel sounds or consonant digraphs.

The basic principle upon which this manner of skill building seems to rest is that of behaviorist learning theory, that the association gains strength through repetition. Each of the skills a teacher wishes the students to achieve must be drilled and practiced again and again until the response becomes automatic rather than thoughtful.

I do not mean to imply that this is the only approach to literacy instruction being implemented in the schools today. Certainly, there are many other philosophies and methodologies being used in teaching. I do believe, however, that more primary level teaching fits the above description than otherwise. The problems with this perspective will be discussed in the next section.

CRITIQUE OF SPECIFIC SKILL INSTRUCTION IN THE DEVELOPMENT OF LITERACY

Basically there are two inter-related reasons that the sequential, bit-by-bit approach to literacy instruction is ineffective: 1) it violates what we know about how children learn, and 2) it violates what we know about how language is learned.

Children are not passive recipients of knowledge and skill. They explore their world, acting upon the objects they find it it and purposefully constructing and reconstructing theories about the relationships among them. Emilia Ferreiro, who has studied the development of the child's conceptualizations about written language, describes the children we have discovered through Piagetian theory:

> The children we know through this theory are learners who actively try to understand the world around them, to answer questions the world poses. They are not learners who wait

> for someone to transmit knowledge to them in an act of benevolence. To the contrary, they learn primarily through their own actions on external objects, and they construct their own categories of thought while organizing their world. (1982, p. 12)

Put another way, children work hard to make sense of what goes on around them, fitting it into the models they have constructed for organizing what they know, or changing the models to achieve a better fit. Their accomplishments with oral language demonstrate the success of this problem solving orientation.

By the time children enter school, they have gained considerable proficiency with the extremely complex semantic and syntactic systems used in the speech communities in which they live. And their achievement has NOT resulted from lessons on discrete bits of language skill. Even though there appears to be a sequence in which particular structures are mastered in oral production and comprehension, the input received by the learner is never limited to an individual structure. At any moment, the child is extracting from the complex total of the language around him the exact bit of linguistic information he needs for the theory currently being tested.

Another essential characteristic of language being learned is that it have meaning and purpose. As Frank Smith points out,

> Language, to a child, always has a use, and the various uses could provide the child with a clue to the purposes underlying differences among utterances. A child soon ignores sounds that do not seem to make a difference. There is, in fact, a powerful mechanism in all children preventing them from wasting time on sounds that they cannot make sense of, that do not appear to have a purpose: that mechanism is boredom. Even if the strangeness of the sounds initially stimulates their interest, children will not continue to pay attention to sounds that do not make meaningful differences. That is why they grow up speaking language and not imitating the noise of the air conditioner. (1983, p. 41)

Children don't learn language for the sake of learning language. They learn language as they use language for communicative purposes. (c.f. Halliday, 1973) The same may be true of the written language they encounter both in and out of the classroom. James Britton (1970) argues,

> Putting this at its simplest, what children

> use language for in school must be 'operations' and not 'dummy runs'. They must continue to use it to make sense of the world: they must PRACTICE language in the sense in which a doctor 'practices' medicine and a lawyer 'practices' law, and NOT in the sense in which a juggler 'practices' a new trick before he performs it. This way of working does not make difficult things easy: what it does is make them worth the struggle. (p. 130)

Yet the "language" children are given in school programs like those described in the preceding section, as well as the tasks they are required to perform, lack both meaning and apparent purpose. What sense can be made of a story entitled, "A Pig Can Jig"? Even the rare child who knows what a 'jig' is probably also knows that a pig can't do it!

> Graded readers, as a species, are notorious for providing a kind of language that is found nowhere else - language that does not make sense as language. (Britton, 1970, p. 162)

The primary reason a child would attend to such nonsense is because the teacher says to, and most little children love and trust their teachers. Herein lies the real problem with the approach. If children encounter inconsistencies between what they thought to be important about written language and what the teacher says is important, it is very likely that their own theories will be abandoned in favor of the teacher's.

> A consequence of all this potential meaningless in reading instruction may be to confound children who are striving to learn through making sense of what they are doing. More seriously, the ultimate danger is that children who do not have the insight that written language should make sense will never achieve it, while children who have got it may be persuaded that they are wrong. (Smith, 1983, p.41)

This poses a more serious threat to "poor readers" than to those who have developed a fairly secure understanding about print. Children develop differentially with regard to their concepts about written language, probably as a function of the quantity and quality of their interactions with print in the environment prior to school entry. Disproportionately large numbers of children from culturally and linguistically different home backgrounds can be found in this group: children labeled "academically at risk" because of the discrepancies between the levels of decoding and comprehension skills. Good reading comprehension is required for success in "content" areas of the

curriculum. But children who have learned that the point of reading is to get the sounds off the page may never make the connection that the "black squigglies" are supposed to mean something. Adding insult to injury, children who have trouble with this type of instruction typically just get more of it.

Recent work on the acquisition of both oral language and literacy points to a superior appoach. In the following section I will examine the extent to which literacy acquisition can be thought of as a developmental, linguistic process, similar in many ways to the process of oral language learning.

THE ACQUISITION OF GRAPHIC SENSE

In 1981, I participated in a study of the development of concepts about written language among Mexican-American and Anglo-American children (Hernandez-Chavez and Curtis, 1983). Our sample included four-year old preschoolers, kindergarteners and first graders in each of two language groups, Spanish-dominant and English-dominant. Our primary goal in the project was to understand the characteristics of various stages in the development of children's conceptualizations about the features and functions of print, i.e. their "graphic sense". In addition, we looked at the relationship between graphic sense level and certain "sociographic" experiences in the home on the one hand, and early reading achievement on the other.

Graphic sense was operationalized as performance on two tasks, the first of which elicited the child's criteria for accepting or rejecting particular graphic representations as being "for reading". The second required the subject to locate various syntactic structures of an utterance within its corresponding written text. Data on the child's interaction with written language at home was obtained by parent interviews. Performance on several school achievement tests was also included in the analysis.

Our findings revealed a definite developmental pattern in the acquisition of graphic sense. Similar notions about written language characterized the reasoning of children in the two language groups at various stages in the process. For example, among the earliest notions acquired was the discrimination between pictures and print. Later such criteria as variety and repetition of individual elements, linear orientation and segmentation were evident in the children's decisions. Among the most advanced responses was the rejection of stimuli made up of real Roman letters, but which were arranged in a phonologically inadmissable order.

While differences were found between the two groups in terms of levels attained at the same age, more important were the striking similarities between the groups concerning the sequence of

concepts acquired. Children from two very different cultural backgrounds with limited exposure at the preschool level to the other group nonetheless gave identical reasons for their responses, and in a similar order. This suggests something universal about the acquisition process.

Two other findings are of relevance to our discussion. One concerns the predictive value of the sociographic factors in the home. Variables related to parents' level of literacy and literacy practices, the child's participation in literacy activities and the availability of reading and writing materials were entered into a multiple regression upon graphic sense level. The most powerful predictors of graphic sense were found to be the extent to which the target child engaged in solitary and social reading and writing activities and the presence of books and magazines in the home.

A most startling finding of the study involves the development of graphic sense as measured by the structure location test. The analysis of the results of this task revealed a list of twenty "distinctive features" which seemed to govern the children's responses, and which could be organized hierarchically. Examples include the use of a length criterion in locating structures, the awareness of the relative position of phrases, the location of phrase components within the phrase, and the correct location of the articles.

> All the features showed substantial growth between preschool and first grade....However, a number of features showed either no growth or a decremental pattern between preschool and first grade (at the kindergarten level) for the Spanish-dominant group. The reasons for this are unclear, but we may speculate that the graphic sense development of these children is interrupted or even disrupted by inappropriate content and/or techniques of instruction. These are geared more closely to teachers' ideas about the level of skill of English dominant youngsters from more middle-class backgrounds. The English dominant kindergarten group did not show this decremental pattern.
> (Hernandez-Chavez and Curtis, 1983, p. 45)

The kindergarten program in which these children were enrolled, while presented in Spanish to the Spanish dominant children, included a heavy emphasis on phonics. Since the alphabetic principle, that individual speech sounds are represented by particular segments of the graphic text, seems to be acquired relatively late in the developmental process, a premature instructional focus upon that notion may have been so confusing

to the children that their hypotheses about written language were temporarily or permanently suspended.

The graphic sense study is only one of many recent investigations into the development of reading and writing among young children. The consistency of our conclusions with those of other research and theory in this area will be the subject of the next section.

OTHER RESEARCH INTO THE DEVELOPMENT OF LITERACY

Ferreiro and Teberosky (1982) used a Piagetian interview approach to study the development of literacy among children between the ages of four and six. They found that children consistently construct hypotheses about the formal characteristics a text must possess to be for reading. Some of the items on the Graphic Sense card sorting task were adapted from materials Ferreiro used in earlier work (1976, 1978) and confirmed many of her findings. For example, most four year-olds distinguish pictures from non-pictorial representations, maintain that a graphic display needs a minimum of three characters to be read and that an individual element cannot be repeated more than twice in a string.

Ferreiro also found that children hypothesize a semantic rather than phonological principle to govern the variations in print, e.g., that the display used to represent 'cat' could simply be repeated several times to represent 'kittens'. Children also first suppose that the referential content of a message should be represented in print, rather than individual words (Ferreiro, 1979).

Ferreiro and Teberosky conclude that long prior to formal literacy instruction, children have constructed working theories about the significance of print, and that the relevance of their knowledge to the learning process is not appreciated by the schools.

> To understand print, preschool children have reasoned intelligently, elaborated good hypotheses about writing systems (although they may not be good in terms of our conventional writing system), overcome conflicts, searched for regularities, and continually attached meaning to written texts. But the logical coherence they impose on themselves disappears when faced with what the teacher demands from them. They must worry about perception and motor control instead of the need to understand. They must acquire a series of skills instead of coming to know an object. They must set aside their own linguistic knowledge and capacity for thought

> until they discover, at a later point, that it is impossible to comprehend a written text without them. (p. 279)

Linda Lavine (1977) investigated the development of preschool children's differentiation of graphic displays, seeking to understand the stage at which they come to distinguish between writing and other sorts of graphic representation. The stimuli she used varied along the dimensions of linearity, multiplicity, and variety of letter strings, and on the similarity to Roman letters.

Lavine found that three, four and five year-olds proceed through a development in their conceptualizations regarding the sorts of graphic displays that should be called "writing":

> (The) data suggest that children's differentiation of conventional writing units from those not in the conventional set follows a pattern beginning with overgeneralization and becoming increasingly specific....In addition to the features of the units, children perceive the superordinate structural features of horizontality, linearity, and variety as characteristic of writing. Through exposure to writing in its various forms in the natural environment, children by the age of three perceive writing as a linear varied series. (p. 94)

Other work on the beginnings of writing also reveals developmental patterns in children's written productions (Clay, 1975; Read, 1975; Graves, 1983; and Temple, et al, 1982). In every case, the child is seen as a competent learner of language, skillful in the formulation of hypotheses and the application of rules.

> When we apply a term like 'pre-reading skills' to such behaviors we demean their real status as early literacy skills, for they actually display all the features of mature strategies already achieving sound and satisfying outcomes well beyond what could be called embryonic - or pre-anything. These strategies, if they are permitted to develop naturally, will lead into mature reading and writing without any discontinuity brought about be a regression into the print starvation of traditional readiness activities such as 'reading' picture books without print. (Holdaway, 1979, pp. 56-57)

School programs frequently fail to take into account the considerable knowledge about written language many children have acquired prior to school entry. Reading readiness activities

which are presented on the assumption that children enter school with little understanding of the features and functions of print fail to take advantage of what they do know.

To summarize to this point, it is apparent that children are capable of learning a great deal about reading and writing without being taught. Furthermore, the conditions under which this "spontaneous" learning occurs can be easily distinguished from those generally present in a traditional primary level classroom. More will be said about the conditions under which the natural acquisition of literacy might be facilitated in school in the following section. In particular, I will examine the potential for the application of certain principles of oral language acquisition to the development of literacy.

PRINCIPLES OF LANGUAGE ACQUISITION

Recent work in the area of both first and second language learning (Cummins, 1981; Krashen, 1981; and Wells, 1981) has provided insight into the ways in which the acquisition process can be facilitated in the classroom. A number of principles can be seen at work in the development of oral language, and it is my position that these same principles have application to the natural development of literacy.

1) Language learning does not depend upon explicit teaching.

2) Language being learned is complex, not sequenced according to difficulty.

3) Language being learned is embedded in the context of meaningful experience.

4) Language learning is a positive, enjoyable experience.

5) Language is learned when the learner's own topic is valued and extended.

6) Receptive and expressive language skills develop interdependently as a function of interaction.

The first two principles above are obvious with regard to oral language development. As it has been demonstrated in the preceding section, children also acquire notions about the characteristics of written language through a developmental process which is well underway before they encounter any formal reading instruction. Some children become proficient readers and writers without explicit teaching (Clark, 1976). A distinguishing characteristic of these early readers was the

presence in their homes of "an adult with time to spare and an interest in reading to them and answering questions for them." (p. 54) This suggests that beyond simple exposure to written language, all that may be required to help a child proceed from curiosity to competence is the support and encouragement of a significant adult or older child.

This idea has relevance to the third principle as well. The context-embeddedness of oral language has been a feature used to distinguish it from text (Donaldson, 1978; Cummins, 1981). The child who listens to stories learns to rely upon the text itself as supportive of a particular interpretation, independent of the situation in which the language is being heard. Undoubtedly, experience with "story language" helps a child understand the text-specific characteristics of written language and the ways in which it differs from speech.

It would be an oversimplification, however, to think of all oral language as context-embedded and all written language as "disembedded". Frank Smith (1982) provides a useful distinction between "situation dependent" language and "context dependent" language, both of which occur in both oral and written modes. "Context dependent" describes language in text, where only linguistic cues to interpretation are available. With "situation dependent" written language, as with much of oral language, one derives cues to its meaning from the surroundings. For example, we do not expect to find the word 'EXIT' written on a blank wall, nor to find laundry detergent in a box labelled, 'CORN FLAKES'. (p. 74) It is this kind of written language that children are likely to learn to read spontaneously and with little difficulty.

One further point on the context of print. William Teale (1981, 1982) has conducted ethnographic observations of preschoolers' interactions with written language in the home. He concludes that

> SOCIAL INTERACTION IS THE KEY. (original emphasis) In fact, the whole process of natural literacy development hinges upon the experience the child has in reading or writing activities which are mediated by literate adults, older siblings, or events in the child's everyday life. Although perhaps not sufficient in and of themselves, the interactive events function as what might usefully be described as the "inducer" in the process. That is to say, such events serve an absolutely essential role in both triggering and furthering development. (1982, p. 559)

It is in the context of meaningful experiences with other people that print takes on significance. Whether the particular event involves reading a bedtime story, making a choice from the T.V.

Guide, or buying groceries from a shopping list, the print can be seen as a tool people use to achieve their purpose. The child who observes and participates in such activities has the opportunity to learn a great deal about the functions of written language.

The fourth principle above primarily concerns the reaction of others to the learner's emerging competence. Growth in oral language skill is typically a source of pleasure and cause for celebration among the families of young children. Rarely is a first word or sentence criticized for its phonological or syntactic imperfection. It is the communicative intent rather that the linguistic form which is accepted and even applauded.

Steve Krashen (1981) has made the point with respect to second language acquisition that a positive affective environment facilitates language learning. The psychological and emotional factors of anxiety, motivation and self-confidence affect the individual's learning potential. Conditions similar to those under which the child's first language is acquired (i.e., those which promote low anxiety, high motivation and high self-confidence) should foster similar growth in second language and, I propose, in literacy as well.

The fifth principle comes from the work of Gordon Wells (1981), who found that the quality of a child's oral language proficiency is related to the extent to which he or she is encouraged to initiate verbal interaction and the extent to which the adult values and extends the child's topics. I submit that the same may be true of written language proficiency: that the pursuit of topics the child chooses because they are of personal interest will foster greater gains in skill development.

The manner of interaction in which the child participates also has an effect on language learning. Development will be enhanced by collaborative exchanges in which what Wells refers to as "the negotiation of meaning" takes place. Parallels can be seen between this type of oral interaction and the "conferencing" techniques proposed by Graves (1981, 1983) for reaction to children's early writing efforts.

The final principle concerns the interdependent development of receptive and expressive language skills. Certainly, with respect to oral language skill, children can understand certain syntactic structures before they can produce those same structures. It is nonetheless true that, at every moment in interaction, children are gaining skill in comprehension as well as production. That is the nature of verbal exchange. I suspect that the same is true of written language: that reading and writing are tied together in a way similar to listening and speaking in oral language.

Participation in written language activities in which messages are sent and received will enable children to learn two essential lessons about print: that what they read has been written by someone, and that what they write can be read by someone.

It may be even more important to provide integrated language activities, in which the connection between writing and reading is clear, for children who experience difficulty in the initial stages of literacy instruction. Clay (1983) suggests that while creative whole-language approaches to learning are tolerated for the "good students", schools generally insist upon sequential, specific skill teaching for the "ill-prepared" child.

> However, it is possible that instructing in this compartmentalized way makes learning more difficult for some children. When we dissect the curriculum and narrow our instructional focus one might expect children of higher intelligence to find it easier to discover interrelationships than children with lesser ability. Instructional emphases could, in fact, construct barriers preventing children from profiting from the overlap in language activities. Instead of focussing on isolated processes, teaching this before that and trusting that somehow children will integrate them as and when necessary, it may be more appropriate to help children to work with the interrelationships across all forms of language activities from the beginning. (p. 279)

The application of these principles to the development of primary level curricula would result in a different orientation toward written language in the classroom. There would be no "lessons" in the conventional sense. Rather the children would engage in projects in which reading and writing would be integral parts of the process. Adults would provide assistance, support and encouragement. The projects would grow out of the children's own interests and curiosity. Part of the teacher's role would be to act as a resource person, gathering reference materials on topics proposed by the students. Specific examples of the functions of written language in the approach I am proposing will be presented in the next section.

ACTIVITIES WHICH FOSTER THE ACQUISITION OF LITERACY IN THE CLASSROOM

The basic premise underlying this approach to curriculum design is that written language can serve authentic purposes in a classroom, similar to those it serves in the lives of adults.

The first set of activities can be thought of as "procedural" in

the sense that they are necessary in the performance of daily classroom routines. Most involve the writing and reading of various sorts of lists and labels.

The taking of attendance and hot lunch counts (to be sent to the school office and cafeteria, respectively) fall into this category. There is no good reason why thirty children should sit passively each morning waiting for the teacher to do these things. A different child could be chosen each day to read the list of names from the attendance folder and make the appropriate marks to note absences or readmittance. One of the earliest reading skills many children seem to master is the recognition of their friends' names.

Similarly, the preparation of activity centers around the room can be done by the children as they arrive in the morning. Lists of necessary materials can be left at each center by the teacher, e.g.,

Measuring cups
Measuring spoons
Wooden spoons
Mixing bowl
(etc.).

Shelves, drawers and storage bins around the room should be appropriately labelled. In addition, a list can be kept of materials which the children notice are running low, so that the teacher can re-order stocks from the school's supply room. In this way, classroom management duties are shared by the participants in the process. The sorts of mundane chores on which many teachers spend too much of their valuable preparation time are turned into opportunities for the children to learn something about reading and writing as well as social responsibility.

Lists of things to do can be provided for the whole class or for individuals. Class "brainstorming" sessions are useful in generating lists of optional activities and proposed projects. The teacher can act as recorder until her or his modeling of that role prompts individual students to volunteer. Student diaries or journals can include self-generated lists of topics to pursue or steps to follow in a planned project. These lists may be discussed and expanded during individual teacher-student conferences. Individual and team responsibilities within group projects can also be kept track of in individual notebooks or wall charts.

The second set of activities centers on the "correspondence" function of written language. Individual student mail boxes can be constructed and mounted on a wall or in a storage bin. That the teacher and other adults who work in the classroom have a mailbox as well is very important. Children love to send notes

to each other and to their teachers, and they love to receive them. Legitimizing this activity can be a very successful technique in literacy instruction.

The next step is to compile a directory of home addresses and phone numbers of the children themselves as well as others in and out of the school with whom they may wish to correspond. Parents will generally be happy to send in lists of grandmothers and other relatives who would like to receive a letter from their child. With younger children it is preferable to print these addresses on index cards to be arranged alphabetically in a small file box than to enter them on pages of an address book. In this way several children at a time can address envelopes by removing the card they need from the box and replacing it when they are finished. Research skills involving alphabetical order (e.g., using the card catalog in the library) are promoted through these activities.

A similar project can involve the publication of a "People Dictionary" in which entries on each of the students and others in the school contain addresses and phone numbers and a short paragraph about the person's job, family or interests. Teams of children can interview each other as well as school staff members, e.g. the principal, secretary or custodian, in order to write the entries. Black and white photographs of each person can be taken and mounted along with the written information and the pages can then be duplicated on the office copy machine. Individual copies can then be produced and bound for each child to take home, thereby extending the potential for contact and correspondence into the children's life outside school hours.

A third set of activities involves the "record keeping" function of writing. Individual journals or diaries, mentioned above with respect to planned activities, can also be used in the traditional sense to record events that have taken place, thoughts or feelings the child has (about anything), or observations he or she makes of a project in progress. Children's attempts to verbalize what they have learned can be very revealing, both to themselves in terms of the way that writing can help them to organize what they know, and to the teacher if they choose to share such entries with him or her.

It is useful with very young children to keep a group journal. Periodically, the teacher may ask the group, "What have we done this week? What have we learned about?" Individual contributions can be recorded on a chart and then typed up for duplication so that each child can keep his or her own copy. The entries can be added each time to a loose-leaf binder so that the document is kept current. Space can be left above the text for illustration. The advantage of working on a group diary is that children will tend to benefit by each other's recollection of what they have done together. Whereas an individual child may

not be able to think of much to write, the group working together can generally produce a fair account of the week's activities. As the year proceeds, the entries tend to become longer, more complete and more thoughtful. There is some spill-over into the individual child's skill in journal writing as well.

Another area of activity which provides for the development of mathematical skills as well as literacy skills involves what could be called the "instructional" function of written language. Cooking from recipes fits into this category. Whether set up as a group project where the recipe is written out on a chart by the teacher, or as a small team or individual activity where the students work from actual cookbooks, following written directions in the preparation of a snack or meal is a most authentic use of print.

Publication of a classroom cookbook is a project which enhances the development of writing skill. Each student (or team) can be responsible for writing a chosen recipe. They will have to be sure to include all the appropriate tools, ingredients, and steps in the process if their readers are to be successful.

Similar projects can include the publication of books of favorite games and instructions for building favorite toys or models out of classroom contruction sets such as Lego. The motivation inherent in these sorts of activities is that of sharing something you know how to do with other children who may not.

The final set of activities I will describe involve the "entertainment" function of written language. These include story reading, story writing and the publication of a classroom library of original storybooks. Story time is a regular part of most primary classroom days. Usually, it is the teacher who selects the books to read and who does the reading. While there is nothing wrong with this, it is also very desireable to have the children read to each other. It is quite frequently possible to arrange for "cross-age tutors" to come from the upper grades to read to little children. But even kindergarteners and first-graders are frequently motivated to volunteer to read their favorite storybook from home or a story they have written to their classmates. Let me emphasize VOLUNTEER. To pressure a young child into reading aloud in front of a group if he or she is not willing to, from my point of view, invites disaster.

Story writing and the publication of storybooks for the classroom library seem to grow naturally out of the kind of interaction with stories that I have been suggesting. As soon as the teacher suggests to a single student that something he or she has written could be "published", the collection of original works in the room seems to multiply overnight. I owe my training in the process to Tina Staller, a fellow in the Bay Area Writers'

Project in Berkeley, California. Many of the techniques come from the work of Donald Graves (1983).

The first step in the process takes place during the individual student-teacher conference, in which a particular piece of the child's writing is chosen for publication. A number of conferences over a number of drafts may precede the final go-ahead for publication. The teacher's input is usually restricted to comments and suggestions for revisions which will clarify the child's intended meaning, not structural or spelling corrections. The text is then divided over a number of pages, usually according to planned illustrations.

The next step is the child's production of a "mock-up". This is a little book, made out of scratch paper stapled together into pages, and into which the child writes on each page the part of the text that should appear on the corresponding pages of the real book. This mock-up will be used by the teacher, aide or parent volunteer to type the text onto good white paper for binding. Corrections of the child's spelling and punctuation errors are made at this point during the typing process. While I feel that older children can make their own corrections and even type or write their own final draft, very young children can be spared that step in the process without any real damage to their sense of authorship. In this way their joy in the creative process is preserved and time is not wasted on laborious corrections.

The next step is for the children to bind their books by sewing the pages together and gluing them into a "hard" cover made of cardboard and cloth book tape. They may then illustrate their story with colored pencils or felt-tipped pens.

The final step is to glue a library card pocket into the binding and insert a "check-out" card. Books may be taken out of the classroom library on an overnight basis by the author or any other student. It is considered a great compliment by the children to have your book taken home by someone else.

In the interest of brevity, I have only mentioned a few of the most important activities I have used in my first grade classroom. I think, however, that the point I wish to make is represented well by these examples: literacy can be LEARNED in the classroom without being explicity TAUGHT in the classroom.

CONCLUSION

My purpose in this paper has been to argue that children do not learn to read and write by having their teachers deliver little bits of language skill in isolated lessons unrelated to the authentic functions of written language. Children learn to read and write by reading and writing.

I have reviewed recent research and theory on the development of reading and writing among young children and have proposed that literacy is acquired through a process similar in many ways to that of oral language. I have suggested that some of the principles of language learning can be applied to the acquisition of literacy, especially as regards the conditions under which growth and development will be facilitated.

Finally, I have provided concrete examples of the types of activities which can be used in primary level classrooms to promote this type of learning. At the heart of the matter is the issue of the teacher's role in the process. As I suggested above, it is not the teacher's responsibility to "deliver" knowledge or skill to the students. Rather it is to provide support and guidance through their learning adventures. At the most basic level, this consists of providing an atmosphere which is conducive to exploration and discovery. In such an environment, I believe, children will apply their problem solving approach to the puzzle of written language and, in the process, acquire literacy skills naturally.

REFERENCES

Britton, J. Language and Learning. New York: The Penguin Press, 1970.

Clark, M. Young Fluent Readers. London: Heinemann Educational Books, 1976.

Clay, M. What Did I Write? Beginning Writing Behaviour. Exeter, New Hampshire: Heinemann Educational Books, 1975.

Clay, M. Getting a theory of writing. in Kroll, B. and Wells, G. (Eds.) Explorations in the Development of Writing. New York: Wiley and Sons Ltd., 1983.

Cummins, J. The role of primary language development in promoting educational success for language minority students. in Schooling and Language Minority Students: A Theoretical Framework. OBBE, California State Dept. of Education, 1981.

Donaldson, M. Children's Minds. Glasgow: Fontana/Collins, 1978.

Ferreiro, E. Development and knowledge of linguistic representation. Paper presented to the Simposio Internacional Sobre el Lenguaje Infantil. Mexico, D.F.: November, 1976.

Ferreiro, E. What is written in a written sentence?: A developmental answer. Journal of Education, 1978, 160, 25-39.

Ferreiro, E. and Teberosky, A. El Sistema de la Escritura en el Desarollo del Nino. Mexico City: Siglo XX, 1979.

Ferreiro, E. and Teberosky, A. Literacy Before Schooling. Exeter, New Hampshire: Heinemann Educational Books, 1982.

Graves, D. Patterns of child control of the writing process. and What children show us about revision. in Walshe, R. (Ed.) Donald Graves in Australia. Exeter, New Hampshire: Heinemann Educational Books, 1981.

Graves, D. Writing: Teachers and Children at Work. Exeter, New Hampshire: Heinemann Educational Books, 1983.

Halliday, M. Explorations in the Functions of Language. London: Arnold, 1973.

Hernandez-Chavez, E. and Curtis, J. Study of Graphic Sense and its Effects on the Acquisition of Literacy. Elmira, Ca.: Instituto de Lengua y Cultura, 1983.

Holdaway, D. The Foundations of Literacy. New York: Ashton Scholastic, 1979.

Krashen, S. Bilingual education and second language acquisition theory. in Schooling and Language Minority Students: A Theoretical Framework. OBBE, California State Dept. of Education, 1981.

Lavine, L. Differentiation of letterlike forms in prereading children. Developmental Psychology, 1977, 13:2, 89-94.

Read, C. Children's Categorization of Speech Sounds in English. Urbana, Ill.: National Council of Teachers of English, 1975.

Shannon, P. A retrospective look at teachers' reliance on commercial reading materials. Language Arts, 1982, 59:8, 844-853.

Smith, F. Writing and the Writer. New York: Holt, Rinehart and Winston, 1982.

Smith, F. Essays into Literacy. Exeter, New Hampshire: Heinemann Educational Books, 1983.

Teale, W. Toward a theory of how children learn to read and write naturally. Language Arts, 1982, 59:6, 555-570.

Teale, W., Estrada, E., and Anderson, A. How preschoolers interact with written communication. in Kamil, M. (Ed.) Thirtieth Yearbook of the National Reading Conference, 1981.

Temple, C., Nathan, R., and Burris, N. The Beginnings of Writing. Boston: Allyn and Bacon, Inc., 1982.

Wells, G. Learning through Interaction: the Study of Language Development. Cambridge: Cambridge University Press, 1981.